

Supplemental Appendix.

Supplemental Methods:

Genetic Studies

Amplifications were performed as follows: 95°C denaturation, 30 seconds; 62°C annealing, 30 seconds; 72°C extension, 1min; 35 cycles. Amplified DNA fragments were sequenced by the conventional method. Primers were developed for amplification and sequencing (Table S1). All *MKRN3* variants were confirmed in two independent PCR products and sequencing reactions of both strands.

Table S1. Primers used for PCR amplification and sequencing reactions of *MKRN3* promoter region.

Primers for PCR amplification	Internal primers
P1F: 5'GAA ACA AAG GGC TGC CAT GA 3'	P1F: 5'GAA ACA AAG GGC TGC CAT GA 3'
P2R: 5'ATC TGG AGC AGC AGA TTC CC 3'	P1R: 5'GGC AGT CCC TAA GTC CCT TC 3'
	P2F: 5'CGC GAT CGG GCA TTA AAA GA 3'
	P2R: 5'ATC TGG AGC AGC AGA TTC CC 3'